Best Available Copy

B1

determining a second velocity vector "V_y" for migration of fluid in the region of interest, the second velocity vector comprising attributes of speed and direction of flow of fluid in a second direction in the region of interest;

extrapolating the velocity vectors to identify the fluid accumulation location; and

wherein the first and second velocity vectors are primarily functions of supplementary pressure "dP" in the region of interest, the permeability "c" of the region of interest, and the viscosity "u" of the fluid in the region of interest.

(Continued on next page.)